

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (previously amended): A low-residual-solvent excipient which has residual solvent of less than 3000 ppm;

wherein said excipient possesses water absorbing property which is characterized by the presence of a methoxy alkylcarboxyl ( $-\text{CH}_2\text{-O-RCOO}^+\text{A}^+$ ) group in said excipient;

wherein R is a lower alkyl group having 1-4 carbon atoms; and

wherein  $\text{A}^+$  is  $\text{Na}^+$  or  $\text{K}^+$ .

Claim 2 (original): The low-residual-solvent excipient according to claim 1, wherein said low-residual-solvent excipient is a polysaccharide based material.

Claim 3 (previously amended): The low-residual-solvent excipient according to claim 2, wherein said polysaccharide based material is one selected from the group consisting of starch based material, cellulose based material, chitin based material, sugar, Arabic gum, and Guar gum.

Claim 4 (previously Amended): The low-residual-solvent excipient according to claim 3, wherein said starch based material is one selected from the group consisting of starch, amylose, amylopectin, gelatin, and sodium starch glycolate.

Claim 5 (original): The low-residual-solvent excipient according to claim 3, wherein said cellulose based material is one selected from the group consisting of cellulose, microcrystalline cellulose, hydroxypropyl cellulose, carboxymethyl cellulose, croscarmellose, and hydroxypropyl-methyl-cellulose.

Claim 6 (currently amended): A The low-residual-solvent excipient according to claim 3 which has residual solvent of less than 3000 ppm;

wherein said excipient possesses water absorbing property which is characterized by the presence of a methoxy alkylcarboxyl ( $-\text{CH}_2-\text{O}-\text{RCOO}^-\text{A}^+$ ) group in said excipient;

wherein R is a lower alkyl group having 1-4 carbon atoms;

wherein  $\text{A}^+$  is  $\text{Na}^+$  or  $\text{K}^+$ , wherein said excipient is chitin-based material is chitosan.

Claim 7 (original): The low-residual-solvent excipient according to claim 1, wherein said residual solvent is at least one selected from the group consisting of methanol, ethanol, isopropanol, and acetone.

Claim 8 (previously amended): The low-residual-solvent excipient according to claim 2, wherein said methoxy alkylcarboxyl ( $-\text{CH}_2-\text{O}-\text{RCOO}^-\text{A}^+$ ) group of said excipient is obtained by reacting a carbinol group ( $-\text{CH}_2\text{OH}$ ) of said excipient with a water absorbing radical.

Claim 9 (previously amended): The low-residual-solvent excipient according to claim 8, wherein said water absorbing radical is a  $-\text{R}-\text{COO}^-\text{A}^+$  radical, wherein R is a lower alkyl group having 1-4 carbon atoms; wherein  $\text{A}^+$  is  $\text{Na}^+$  or  $\text{K}^+$ .

Claim 10 (original): The low-residual-solvent excipient according to claim 9, wherein said ( $-\text{R}-\text{COO}^-\text{A}^+$ ) radical is an acetate sodium radical ( $-\text{CH}_2\text{COONa}$ ).

Claim 11 (cancelled)

Claim 12 (original): The low-residual-solvent excipient according to claim 1, wherein said low-residual-solvent excipient is used in at least one selected from the group consisting of pharmaceuticals, fish foods, plant growth regulators, pesticides and herbicides.

Claim 13 (currently amended): A method for producing the low-residual-solvent excipient according to claim 1, comprising:

mixing a solvent/water solution with said low-residual-solvent excipient to form a solvent/water/excipient mixture;

removing said solvent by filtering said solvent/water/excipient mixture;

drying said retained excipient to produce said low-residual-solvent excipient; wherein said solvent/water solution is an isopropanol/water solution having 75-95% by volume of isopropanol and 5-25% by volume of water.

Claim 14 (cancelled)

Claim 15 (cancelled)

Claim 16 (currently amended): The A method for producing the low-residual-solvent excipient according to claim 14 1, comprising:

mixing a solvent/water solution with said low-residual-solvent excipient to form a solvent/water/excipient mixture;

removing said solvent by filtering said solvent/water/excipient mixture;

drying said retained excipient to produce said low-residual-solvent excipient; wherein said solvent/water solution is an acetone/water solution having has 65-95% by volume of acetone and 5-35% by volume of water.

Claim 17 (currently amended): The A method for producing the low-residual-solvent excipient according to claim 1 14, comprising:

mixing a solvent/water solution with said low-residual-solvent excipient to form a solvent/water/excipient mixture;

removing said solvent by filtering said solvent/water/excipient mixture;

drying said retained excipient to produce said low-residual-solvent excipient; wherein  
said solvent/water solution is a methanol/water solution having has 60 -85% by volume of  
methanol and 15-40% by volume of water.

Claim 18 (original): The method according to claim 13, wherein said low-residual-solvent excipient is a polysaccharide based material.

Claim 19 (original): The method according to claim 13, wherein said solvent/water solution and said low-residual-solvent excipient is mixed at about 20 to 30°C and with high-speed agitation.

Claim 20 (original): The method according to claim 19, wherein said high speed agitation is at least at 90 rpm.

Claims 21-25 (cancelled)

Claim 26 (previously amended) The method according to claim 18, wherein said polysaccharide based material is one selected from the group consisting of potato starch, corn starch, amylose, amylopectin, gelatin, sodium starch glycolate, cellulose, microcrystalline cellulose, hydroxypropyl cellulose, carboxymethyl cellulose, croscarmellose, hydroxypropyl-methyl-cellulose, and chitosan.

Claim 27 (cancelled)

Claim 28 (cancelled)

Claim 29 (cancelled)

Claim 30 (currently amended): The method according to claim 18 28, further comprising  
the steps of:

attaching a water-absorbing radical to said low-residual-solvent excipient before said low-residual-solvent excipient mixes with said solvent/water solution;

wherein said water absorbing radical is a  $(-\text{RCOO}^-\text{A}^+)$  radical, where  $\text{A}^+$  is  $\text{Na}^+$  or  $\text{K}^+$ ;  
wherein R is a lower alkyl group having 1-4 carbon atoms; and wherein said  $(-\text{RCOO}^-\text{A}^+)$  radical is attached to a carbinol  $(-\text{CH}_2\text{OH})$  group of said low-residual-solvent excipient to form a  $(-\text{CH}_2-\text{O}-\text{R}-\text{COO}^-\text{A}^+)$  linkage.

Claim 31 (previously added): The method according to claim 30, wherein said  $(-\text{CH}_2-\text{O}-\text{R}-\text{COO}^-\text{A}^+)$  linkage is produced by mixing said polysaccharide based material with methanol, sodium hydroxide, and a  $(\text{Cl}-\text{R}-\text{COO}^-\text{A}^+)$  at about  $100^\circ\text{C}$  for about 10 hours.

Claim 32 (previously added): The method according to claim 31, wherein said  $(\text{Cl}-\text{R}-\text{COO}^-\text{A}^+)$  is a monochloroacetate sodium  $(\text{Cl}-\text{CH}_2-\text{COONa})$ .

Claim 33 (currently amended): A low-residual-solvent excipient which has residual solvent of less than 3000 ppm and possesses water absorbing property which is characterized by the presence of a methoxy alkylcarboxyl  $(-\text{CH}_2-\text{O}-\text{RCOO}^-\text{A}^+)$  group in said excipient; wherein R is a lower alkyl group having 1-4 carbon atoms; wherein  $\text{A}^+$  is  $\text{Na}^+$  or  $\text{K}^+$ ; and wherein said low-residual-solvent excipient is a gelatinized starch.

Claim 34 (previously added): The low-residual-solvent excipient which has residual solvent according to claim 33, wherein said gelatinized starch is starch 1500 from corn starch.

Claim 35 (new): The method according to claim 16, wherein said acetone/water solution and said low-residual-solvent excipient is mixed at about  $20$  to  $30^\circ\text{C}$  and with high-speed agitation of at least 90 rpm.

Claim 36 (new): The method according to claim 17, wherein said methanol/water solution and said low-residual-solvent excipient is mixed at about 20 to 30°C and with high-speed agitation of at least 90 rpm.